

Appl. No. 09/997,132
Amdt. Dated June 16, 2005
Reply to Office Action of March 16, 2005

•• REMARKS/ARGUMENTS ••

The Office Action of March 16, 2005 has been thoroughly studied, accordingly the present amendments to the application, considered together with the following remarks, are believed to be sufficient to place the application into condition for allowance.

By the present amendment, independent claim 1 has been changed to recite that the superabsorbent polymer particles are distributed so as to have a non-discontinuous density gradient in a thickness direction of the liquid-absorbent core which extends across an entire thickness of the single zone so that a majority of the superabsorbent particles are located within a lower half of the liquid-absorbent core.

Support for these limitations can be readily be found in the paragraph bridging pages 5 and 6 of the Substitute Specification where it is stated that "density at which the polymer particles 32 are distributed within the core 4 gradually increases in the thickness direction of the core."

Further support can be found in the drawings, particularly Figs. 2 and 4 which depict the density at which the polymer particles are distributed within the core.

Also by the present amendment, independent claim 1 has been changed to recite that the at least one pair of grooves are collinear. This change avoids the redundancy with dependent claim 12 noted by the Examiner.

Entry of the changes to the claims is respectfully requested.

Appl. No. 09/997,132
Amdt. Dated June 16, 2005
Reply to Office Action of March 16, 2005

Claims 1-12 are pending in this application.

Claims 1-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,459,016 to Rosenfeld et al. (Rosenfeld et al. '016) in view of U.S. Patent No. 5,451,442 to Pieniak et al. alone or in the alternative also in view of U.S. Patent No. 5,514,104 to Cole et al. and U.S. Patent No. 5,891,118 to Toyoshima et al.

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Rosenfeld et al '016 in view of Pieniak et al, Cole et al and Toyoshima et al.

Claims 1-8, 10 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over European Patent Application No. 1 023 884 to Rosenfeld et al. (Rosenfeld et al. '884) in view of Pieniak et al. alone or in the alternative also in view of Cole et al. and Toyoshima et al.

Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Rosenfeld et al. '884 in view of Pieniak et al, Cole et al and Toyoshima et al.

For the reasons set forth below, it is submitted that all of the pending claims are allowable over the prior art of record and therefore, each of the outstanding prior art rejections of the claims should properly be withdrawn.

Favorable reconsideration by the Examiner is earnestly solicited.

The changes presented herein for the claims were made taking the Examiner's interpretation of the claims into account.

On pages 2-4 of the Official Action the Examiner has set forth her interpretation of applicants' pending claims:

Appl. No. 09/997,132
Amdt. Dated June 16, 2005
Reply to Office Action of March 16, 2005

The Examiner has stated that:

...the claim terminology "at a lower portion of the....core" does not require the zone be at or form the lowest or lowermost portion of the core not be at or form the lowest half of the core not that the zone only be at or form a lower portion. As claimed, at least a portion of the zone just has to be at a portion of the core which portion is lower than another portion of the core.

The Examiner further stated:

...since claim 12 is a dependent claim, i.e. further limits the claims from which it depends, and requires the grooves of the pair be collinear, claim 1, i.e. "aligned in a longitudinal direction," is interpreted as not requiring the grooves of the pair be collinear but merely requiring that a longitudinal straight line drawn from one end of the article to the other would intersect at least a portion of each groove of the pair.

In response to the Examiner's interpretation of the claim language, independent claim 1 has been amended to recite that the superabsorbent polymer particles are distributed so as to have a non-discontinuous density gradient in a thickness direction of the liquid-absorbent core which extends across an entire thickness of the single zone so that a majority of the superabsorbent particles are located within a lower half of the liquid-absorbent core.

In addition, independent claim 1 has been changed to recite that the at least one pair of grooves are collinear. (This limitation has been deleted from dependent claim 12).

In relying upon Rosenfeld et al. '016 the Examiner states that the "zone" recited in applicants' independent claim 1:

...is considered the two adjacent superabsorbent concentrations, e.g. 8 and 10 as seen in Figure 1 of similar to only 10 and 64 in Figures 4 and 5, which have had grooves compressed thereinto, e.g. as seen in Figures 2 and 4-5...

Appl. No. 09/997,132
Amdt. Dated June 16, 2005
Reply to Office Action of March 16, 2005

The manner in which the Examiner has interpreted two adjacent superabsorbent concentrations in Rosenfeld et al. '016 as reading on applicants' "single zone" fails to meet the limitation that a majority of the superabsorbent particles are localized in the single zone are also located within a lower half of the liquid-absorbent core.

Note in every embodiment, Rosenfeld et al. '016 includes an upper zone containing superabsorbent polymer particles (e.g., zone 8 in Fig. 1). Moreover, there are no embodiments in which two adjacent zones of superabsorbent polymer particles collectively include a majority of the superabsorbent particles that are also located within a lower half of the liquid-absorbent core.

In addition, the manner in which the Examiner is interpreting Rosenfeld et al. '016 does not read on the limitation in applicants' independent claim 1 that that the superabsorbent polymer particles are distributed so as to have a non-discontinuous density gradient in a thickness direction of the liquid-absorbent core which extends across an entire thickness of the single zone.

By interpreting two of the adjacent absorbency zones (e.g., 8 and 10 in Fig. 1) collectively as reading on applicants' claimed single zone, the resulting structure would necessarily include a discontinuous density gradient between the adjacent absorbency zones, which is excluded from applicant's claimed invention.

Rosenfeld et al. '884 teaches an absorbent article having a thickness in which the upper 35% of the thickness comprises a high absorbency zone that comprises absorbent fibers and superabsorbent polymer particles and in which the lower 65% of the thickness comprises a low absorbency zone that is "substantially free" of superabsorbent polymer particles.

Appl. No. 09/997,132
Amdt. Dated June 16, 2005
Reply to Office Action of March 16, 2005

Applicants' independent claim 1 requires that a majority of the superabsorbent particles are located within a lower half of the liquid-absorbent core.

Accordingly, Rosenfeld et al. '884 teaches away from applicants' claimed invention.

The Examiner has relied upon Pieniak et al. as teaching that it is known to wrap an absorbent core in tissue paper.

The Examiner has relied upon each of Toyoshima et al. and Cole et al. as teaching the "interchangeability of an embossed groove pattern in which grooves are continuous alone/and curved for a pattern in which the grooves are discontinuous alone/and straight."

The Examiner's further reliance upon Pieniak, Toyoshima et al. and Cole et al. does not overcome the differences between the present invention and each of Rosenfeld et al. '016 and Rosenfeld et al. '884 which are discussed above.

Based upon the above distinctions between the prior art relied upon by the Examiner and the present invention, and the overall teachings of prior art, properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon the prior art as required under 35 U.S.C. §103 to establish a *prima facie* case of obviousness of applicants' claimed invention.

It is, therefore, submitted that any reliance upon prior art would be improper inasmuch as the prior art does not remotely anticipate, teach, suggest or render obvious the present invention.

It is submitted that the claims, as now amended, and the discussion contained herein clearly show that the claimed invention is novel and neither anticipated nor obvious over the teachings of the prior art and the outstanding rejections of the claims should hence be withdrawn.

Appl. No. 09/997,132
Amdt. Dated June 16, 2005
Reply to Office Action of March 16, 2005

Therefore, reconsideration and withdrawal of the outstanding rejections of the claims and an early allowance of the claims is believed to be in order.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested.

If upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved, the Examiner is invited to contact applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,



Michael S. Gzybowski
Reg. No. 32,816

BUTZEL LONG
350 South Main Street
Suite 300
Ann Arbor, Michigan 48104
(734) 995-3110

129498.1